1.   (currently amended)   A method for use in a wireless communications network for allocating spectral resource made up of a plurality of resource units in a multiple access wireless link extending between a partition of a base station and at least one child user equipment of the partition, <u>wherein the network has at least one base station which has at least two partitions or the network has at least two base stations, each having at least one partition,</u> the method comprising:

establishing a number of resource units making up a fixed allocation of resource units<u>, said fixed allocation of resource units being</u> <s>which is</s> the same for all user equipments of the network;

allocating the fixed allocation of resource units to each child user equipment in the partition.

2.   (currently amended)   A method according to claim 1 wherein the [[a]] number of resource units making up fixed allocation is established by:

determining a measure of a maximum likely number of child user equipments per partition of the network;

calculating the fixed allocation of resource units based on the ratio of a number of resource units in the partition per unit time to the measure.

3.   (original) A method according to claim 1 wherein the fixed allocation is a selected minimum number of resource units.

4.   (original) A method according to claim 1 wherein the spectral resource is made up of a number of frequency channels and each resource unit is a sub-set of the spectral resource smaller than a frequency channel.

5.   (original) A method according to claim 2 wherein the measure of the maximum likely number of user equipments per partition is derived according to a Poisson distribution of the average number of user equipments per partition of the network.

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6. (original) A method according to claim 2 wherein the fixed allocation of resource units is calculated according to the following equation:

$$F = T/M$$

where

F = number of resource units making up the fixed allocation;

T = number of resource units per unit time; and

M = maximum likely number of user equipments per partition.

7. (original) A method according to claim 1 wherein resource units which are not allocated in the fixed allocation of resource units to child user equipments remain unallocated to user equipments.

8. (original) A method according to claim 1 wherein the method additionally comprises allocating remaining resource units which are not allocated in the fixed allocation of resource units to child user equipments, hereafter remaining resource units, to child user equipments in the partition by:

determining the gain of the radio link between the partition and each child user equipment; and

allocating the remaining resource units among the child user equipments by prioritising user equipments having a high gain link.

9. (original) A method according to claim 1 wherein the method additionally comprises allocating remaining resource units which are not allocated in the fixed allocation of resource units to child user equipments, hereafter remaining resource units, to child user equipments in the partition by:

determining the gain of the radio link between the partition and each child user equipment; and

allocating the remaining resource units among the child user equipments in the partition in proportion to the gain of the radio links to the child user equipments.

10. (original) A method according to claim 1 additionally comprising:

determining the gain of the radio link between the partition and each child user equipment of the partition; and

regulating the transmit power of each child user equipment according to the determined gain for that user equipment such that lower gain user equipments transmit with higher power than higher gain user equipments.

11. (original) A method according to claim 1 additionally comprising:

determining the gain of the radio link between the partition and each child user equipment of the partition; and

regulating the transmit power of each child user equipment such that the transmit power is inversely proportional to the gain.

12. (original) Computer executable software code stored on a computer readable medium for making a computer execute the method of claim 1.

13. (original) A programmed computer, which stores computer executable program code for making the computer execute the method of claim 1.

14. (original) A computer readable medium having computer executable software code stored thereon, which code is for making a computer execute the method of claim 1.

15. (currently amended) A wireless communication network, wherein the network has at least one base station which has at least two partitions or the network has at least two base stations, each having at least one partition, comprising at least one base station having at least one partition via which at least one child user equipment communicates over a wireless link which link comprises spectral resource made up of a plurality of resource units wherein the network

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includes a processing block configured to establish a number of resource units making up a fixed allocation of resource units~~-~~, said fixed allocation of resource units being ~~which is~~ the same for all user equipments of the network and to allocate the fixed allocation of resource units to each child user equipment in the partition.

16.   (original) A network according to claim 15 wherein the number of resource units making up the fixed allocation is established by determining a measure of a maximum likely number of child user equipments per partition and calculating the fixed allocation of resource units based on the ratio of a number of resource units in the partition per unit time to the measure.

17.   (original) A network according to claim 15 wherein the fixed allocation is a selected minimum number of resource units.

18.   (original) A network according to claim 15 wherein the spectral resource is made up of a number of frequency channels and each resource unit is a sub-set of the spectral resource smaller than a frequency channel.

19.   (original) A network according to claim 16 wherein the measure of the maximum likely number of user equipments per partition is derived according to a Poisson distribution of the average number of user equipments per partition.

20.   (original) A network according to claim 15 wherein resource units which are not allocated in the fixed allocation of resource units to child user equipments remain unallocated to user equipments.

21.   (original) A network according to claim 15 wherein, for a given partition, the processing block is configured to allocate remaining resource units which are not allocated in the fixed allocation of resource units to each user equipment by allocating the remaining resource units among the child user equipments by prioritising user equipments having a high gain link to the partition.

22.   (original) A network according to claim 15 wherein, for a given partition, the processing block is configured to allocate remaining resource units which are not allocated in the fixed allocation of resource units to each user equipment by

allocating the remaining resource units among the child user equipments in the partition in proportion to the gain of the radio links between the child user equipments and the partition.

23.   (original) A network according to claim 15 wherein the transmit power of each child user equipment is regulated according to the gain between that user equipment and its partition such that lower gain user equipments transmit with higher power than higher gain user equipments.

24.   (currently amended) A resource allocation controller for use in a wireless communications network for allocating spectral resource made up of a plurality of resource units in a multiple access wireless link extending between a partition of a base station and at least one child user equipment of the partition, wherein the network has at least one base station which has at least two partitions or the network has at least two base stations, each having at least one partition, wherein the controller is configured to establish a number of resource units making up a fixed allocation of resource units-, said fixed allocation of resource units being which is the same for all user equipments of the network; and to allocate the fixed allocation of resource units to each child user equipment in the partition.

25.   (original) A controller according to claim 24 wherein the number of resource units making up the fixed allocation of resource units is established by obtaining a measure of a maximum likely number of child user equipments per partition of the network and obtaining a fixed allocation of resource units based on the ratio of a number of resource units in the partition per unit time to the measure.

26.   (original) A controller according to claim 24 wherein the spectral resource is made up of a number of frequency channels and each resource unit is a sub-set of the spectral resource smaller than a frequency channel.

27.   (original) A controller according to claim 25 wherein the measure of the maximum likely number of user equipments per partition is derived according to a Poisson distribution of the average number of user equipments per partition.

28.   (original) A controller according to claim 24 wherein the fixed allocation is a selected minimum number of resource units.

29.   (original) A controller according to claim 24 wherein resource units which are not allocated in the fixed allocation of resource units to child user equipments remain unallocated to user equipments.

30.   (original) A controller according to claim 24 which is configured to allocate remaining resource units which it did not allocate in the fixed allocation of resource units by prioritising child user equipments of the partition having a high gain link to the partition.

31.   (original) A controller according to claim 24 which is configured to allocate remaining resource units which it did not allocate in the fixed allocation of resource units by allocating the remaining resource units among the child user equipments in the partition in proportion to the gain of the radio links to the child user equipments.

32.   (original) A controller according to claim 24 for deployment in a network in which the transmit power of each child user equipment is regulated according to the gain between that user equipment and its partition such that lower gain user equipments transmit with higher power than higher gain user equipments.

33.   (currently amended)   Computer executable software code stored on a computer readable medium for establishing a number of resource units making up a fixed allocation of spectral resource made up of a plurality of resource units in a multiple access wireless link of a wireless communication network, wherein the network has at least one base station which has at least two partitions or the network has at least two base stations, each having at least one partition, the code comprising:

    code to determine a measure of a maximum likely number of child user equipments per network partition; and

    code to determine a fixed allocation of resource units based on the ratio of a number of resource units in the link per unit time to the measure,

said fixed allocation of resource units being the same for all user equipments of the network,.

34.   (currently amended) A programmed computer for establishing a number of resource units making up a fixed allocation of spectral resource made up of a plurality of resource units in a multiple access wireless link of a wireless communication network, which stores computer executable program code, wherein the network has at least one base station which has at least two partitions or the network has at least two base stations, each having at least one partition, which said code includes:

code for determining a measure of a maximum likely number of child user equipments per network partition; and

code for determining the fixed allocation of resource units, said fixed allocation of resource units being same for all user equipments of the network, based on the ratio of a number of resource units in the link per unit time to the measure.

35.   (currently amended)   A computer readable medium having computer executable software code stored thereon, which code is for establishing a number of resource units making up a fixed allocation of spectral resource made up of a plurality of resource units in a multiple access wireless link of a wireless communication network, wherein the network has at least one base station which has at least two partitions or the network has at least two base stations, each having at least one partition, wherein the code is for carrying out the following:

determining a measure of a maximum likely number of child user equipments per network partition; and

determining a fixed allocation of resource units based on the ratio of a number of resource units in the link per unit time to the measure, . said fixed allocation of resource units —being the same for all user equipments of the network,.

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36.　(currently amended)　Computer executable software code stored on a computer readable medium for allocating a proportional allocation of spectral resource made up of a plurality of resource units in a multiple access wireless link of a wireless communication network, wherein the network has at least one base station which has at least two partitions or the network has at least two base stations, each having at least one partition, the code comprising:

　　code for discarding resource units allocated to child user equipments in a fixed allocation so as to determine remaining resource units, said fixed allocation of resource units being the same for all user equipments of the network;

　　code for determining the gain of the radio link between the partition and each child user equipment; and

　　code for allocating the remaining resource units among the child user equipments by prioritising user equipments having a high gain link.

37.　(currently amended)　A wireless communication network, wherein the network has at least one base station which has at least two partitions or the network has at least two base stations, each having at least one partition, comprising at least one base station having at least one partition via which at least one child user equipment communicates over a wireless link which link comprises spectral resource made up of a plurality of resource units wherein the network includes processing means for establishing a number of resource units making up a fixed allocation of resource units-, said fixed allocation of resource units being which is the same for all user equipments of the network and means for allocating the fixed allocation of resource units to each child user equipment in the partition.

38.　(currently amended) A resource allocation controller for use in a wireless communications network for allocating spectral resource made up of a plurality of resource units in a multiple access wireless link extending between a partition of a base station and at least one child user equipment of the partition, wherein the network has at least one base station which has at least two partitions or the network has at least two base stations, each having at least one partition, wherein the controller comprises means for establishing a number of resource

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units making up a fixed allocation of resource units~, said fixed allocation of resource units being which is the same for all user equipments of the network and means for allocating the fixed allocation of resource units to each child user equipment in the partition.

39.   (currently amended)   A method for use in a wireless communications network for allocating spectral resource made up of a plurality of resource units in a multiple access wireless link extending between a partition of a base station and at least one child user equipment of the partition, wherein the network has at least one base station which has at least two partitions or the network has at least two base stations, each having at least one partition, the method comprising:

determining a measure of a maximum likely number of child user equipments per partition of the network;

calculating a fixed allocation of resource units based on the ratio of a number of resource units in the partition per unit time to the measure, said fixed allocation of resource units ~being the same for all user equipments of the network.; and

allocating the fixed allocation of resource units to each child user equipment in the partition.

40.   (currently amended)   A method for use in a wireless communications network for allocating spectral resource made up of a plurality of resource units in a multiple access wireless link extending between a partition of a base station and at least one child user equipment of the partition, wherein the network has at least one base station which has at least two partitions or the network has at least two base stations, each having at least one partition, the method comprising:

establishing a minimum number of resource units making up a fixed allocation of resource units, said fixed allocation of resource units being the same for which is to be allocated to all user equipments of the network;

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allocating the fixed allocation of resource units to each child user equipment in the partition; and

allocating remaining resource units which are not allocated in the fixed allocation of resource units to child user equipments, hereafter remaining resource units, to child user equipments in the partition by:

determining the gain of the radio link between the partition and each child user equipment; and

allocating the remaining resource units among the child user equipments by prioritising user equipments having a high gain link.